

Notice of Allowability

Application No.

10/722,691

Examiner

JEAN B. FLEURANTIN

Applicant(s)

INDECK ET AL.

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/27/06.
2. ☒ The allowed claim(s) is/are 62, 63, 87-90, 92-112 and 114-118.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


SHAHID ALAM
PRIMARY EXAMINER

DETAILED ACTION

1. This is in response to Applicant's communication on 04/27/06, with respect to pending claims 62, 63, 87-90, 92-118 have been fully considered and are persuasive. Therefore, the rejection of last Office action has been withdrawn.

However, upon further review claim 113 has been canceled as indicated in section 4.

Claim 1-61, 64-86 and 91 previously canceled.

2. Claims 62, 63, 87-90, 92-112 and 114-118 remain pending for examination.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Benjamin L. Volk, Jr. (Reg. No. 48,017) on April 27, 2006.

The application has been amended as follow:

In the claims,

Please cancel

Claim 113.

Replace old version of claim 112 with the new version

Claim 112.

A method for retrieving data from a mass storage medium, said method comprising the steps of:

- receiving a search command from a processor for said mass storage medium,
- determining a key representative of the data desired to be retrieved from said mass storage medium,
- making a pattern comparison between said key with a data signal representative of a continuous stream of data read from said mass storage medium, said determined key being an analog key or a digital representation of an analog key, said data signal being an analog data signal if said key is an analog key, and wherein said data signal is said digital representation of said analog signal if said key is said digital representation of said analog key,
- determining, in response to said pattern comparison, which data within said data signal matches said key; and
- wherein said pattern comparison making step comprises computing a correlation coefficient between said key and said data signal, and wherein said match determining step comprises comparing said computed correlation coefficient with a predetermined threshold value to thereby determine whether a match exists between said data key and said data signal.

Claim 114, line 1, change "The method of claim 113 further comprising adjusting said" to - - The method of claim 112 further comprising adjusting said - -.

Claim 115, line 1, change "The method of claim 113 wherein said key comprises said analog" to -
- The method of claim 112 wherein said key comprises said analog - -.

Claim 117, line 1, change "The method of claim 113 further comprising reading data from" to - -
The method of claim 112 further comprising reading data from - -.

Claim 118, line 1, change "The method of claim 113 wherein said search command receiving" to -
- The method of claim 112 wherein said search command receiving - -.

REASONS FOR ALLOWANCE

4. With respect to claims are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

With respect to claims 62, 87 and 113 the claimed features "a data retrieval system comprising a retrieval device in communication with the mass storage medium, wherein the retrieval device is further configured to perform the pattern comparison by calculating a correlation coefficient that indicative of a degree of correlation between the key and the data stream, and wherein the retrieval device is further configured to determine that an approximate match exists if the correlation coefficient has a value larger than or at least equal to a predetermined threshold value" in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record. With respect to claim 92, the claimed features "a retrieval device for retrieving data from a mass storage medium, said retrieval device comprising wherein said approximate matching unit is further configured to perform said comparison by computing a correlation coefficient between said data key and said data signal, and wherein said approximate matching unit is further configured to compare said computed correlation coefficient with a predetermined threshold value" in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record.

The dependent claims, being definite, further limiting, and fully enabled by the specification are also allowed.

The closest prior art, Sidhu et al., String Matching on Multicontext FPGAs using Self-Reconfiguration. Vitols et al., U.S. Patent Number 4,081,607 relates to system capable of recognizing keywords in continuous speech but fail to teach the above limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

April 29, 2006



SHAHID ALAM
PRIMARY EXAMINER